

## WEST Search History





DATE: Friday, September 14, 2007

<b>Hide?</b>	<b>Set Name</b>	<b>Query</b>	<b>Hit Count</b>
	<i>DB=PGPB,USPT; PLUR=YES; OP=ADJ</i>		
<input type="checkbox"/>	L15	(dextran near3 (phosphorylat\$ or phosphate)).clm.	58
<input type="checkbox"/>	L14	(dextran near3 (phosphorylat\$ or phosphate)).ab.	2
<input type="checkbox"/>	L13	(dextran near3 (phosphorylat\$ or phosphate))	11926
<input type="checkbox"/>	L12	L11 and (dextran near3 (phosphorylat\$ or phosphate))	0
<input type="checkbox"/>	L11	Meiji.as.	539
<input type="checkbox"/>	L10	L7 and (dextran near3 phosph\$)	1
<input type="checkbox"/>	L9	L7 and (dextran near3 phosphor\$)	1
<input type="checkbox"/>	L8	L7 and dextran	11
<input type="checkbox"/>	L7	Kitazawa.in.	707
<input type="checkbox"/>	L6	L4 and dextran	1
<input type="checkbox"/>	L5	L4 and dextran.ab.	1
<input type="checkbox"/>	L4	(Saito Tadao).in.	97
<input type="checkbox"/>	L3	Saito.in.	16086

END OF SEARCH HISTORY

FILE 'REGISTRY' ENTERED AT 17:21:34 ON 14 SEP 2007  
EXP DEXTRAN PHOS/CN  
L17 1 S E2

FILE 'CAPLUS' ENTERED AT 17:22:11 ON 14 SEP 2007  
L18 5 S L17

FILE 'STNGUIDE' ENTERED AT 17:22:36 ON 14 SEP 2007

FILE 'HCAPLUS' ENTERED AT 17:23:59 ON 14 SEP 2007  
L19 271 S ((PHOSPHORYL? OR PHOSPHATE) (3A)DEXTRAN)  
L20 0 S FORMALDEHYDR  
L21 868832 S IMMUNO?  
L22 0 S L19 AND L20  
L23 25 S L19 AND L21  
L24 0 S L22 AND (PY<2003 OR AY<2003 OR PRY<2003)  
L25 18 S L23 AND (AY<2003 OR PY<2003 OR PRY<2003)

FILE 'STNGUIDE' ENTERED AT 17:24:10 ON 14 SEP 2007

FILE 'HCAPLUS' ENTERED AT 17:24:41 ON 14 SEP 2007  
L26 149140 S FORMALDEHYDE  
L27 0 S L19 AND L26  
L28 0 S L27 AND (AY<2003 OR PY<2003 OR PRY<2003)

FILE 'STNGUIDE' ENTERED AT 17:24:46 ON 14 SEP 2007

FILE 'HCAPLUS' ENTERED AT 17:25:29 ON 14 SEP 2007  
L29 232153 S PHOSPHORYL?  
L30 62385 S POLYSACCHARIDE  
L31 3 S L29 AND L30 AND L26  
L32 3 S L31 AND (AY<2003 OR PY<2003 OR PRY<2003)

FILE 'HCAPLUS' ENTERED AT 17:52:13 ON 14 SEP 2007  
L33 70529 S (POLYPHOSPHATE OR POLYPHOSPHORIC OR PYROPHOSPHATE OR PYROPHOS  
L34 171538 S FORMAMIDE OR FORMALDEHYDE  
L35 10 S L19 AND L33  
L36 4 S L19 AND L34  
L37 2 S L19 AND L33 AND L34  
L38 8 S L35 AND (PY<2003 OR AY<2003 OR PRY<2003)  
L39 3 S L36 AND (PY<2003 OR AY<2003 OR PRY<2003)  
L40 1 S L37 AND (PY<2003 OR AY<2003 OR PRY<2003)

PASSWORD:

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \*  
SESSION RESUMED IN FILE 'STNGUIDE' AT 17:21:13 ON 14 SEP 2007  
FILE 'STNGUIDE' ENTERED AT 17:21:13 ON 14 SEP 2007  
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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.06	126.21
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-17.94

=> file registry

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.12	126.27
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-17.94

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STRUCTURE FILE UPDATES: 13 SEP 2007 HIGHEST RN 947061-18-9  
DICTIONARY FILE UPDATES: 13 SEP 2007 HIGHEST RN 947061-18-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and  
predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=> exp dextran phos/cn

E1	1	DEXTRAN PALMITATE/CN
E2	1	DEXTRAN PALMITATE PHOSPHATE/CN
E3	0 -->	DEXTRAN PHOS/CN
E4	1	DEXTRAN PL 1S/CN
E5	1	DEXTRAN POLYALDEHYDE/CN
E6	1	DEXTRAN POLYSULFATE/CN
E7	1	DEXTRAN PT 25/CN
E8	1	DEXTRAN PVD/CN
E9	1	DEXTRAN RMI/CN
E10	1	DEXTRAN SODIUM SULFATE/CN
E11	1	DEXTRAN SODIUM SULFATE-A-POLY(L-LYSINE) COMPLEX/CN
E12	1	DEXTRAN SODIUM SULFATE-DL-LACTIDE GRAFT COPOLYMER/CN

=> s E2  
L17 1 "DEXTRAN PALMITATE PHOSPHATE"/CN

=> file caplus  
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
5.40	131.67

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
0.00	-17.94

CA SUBSCRIBER PRICE

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FILE COVERS 1907 - 14 Sep 2007 VOL 147 ISS 13

FILE LAST UPDATED: 13 Sep 2007 (20070913/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s l17

L18 5 L17

=> d l18 1-5 ti abs bib

L18 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

TI The stabilization and release of hirudin from liposomes or lipid-assemblies coated with hydrophobically modified dextran

AB Hirudin is a 65-amino acid peptide and the most potent and specific known inhibitor of thrombin ( $K_i = 0.2$  pM). The short elimination half-life of hirudin from the body (1 h) necessitates the use of a sustained and controlled delivery system. A proliposome method was used to entrap hirudin in liposomes coated with palmitoyl dextran-coated liposomes and lipid-assemblies. In vitro release studies of hirudin were performed using the lipid systems enclosed in dialysis membranes or deposited in the pores of a vascular graft. The activity of hirudin and released hirudin was measured using a thrombin chromogenic substrate assay. Entrapment efficiencies of hirudin in lipid-assemblies approached 100%, however, the release of hirudin from these systems was rapid with 90% released in 17 h. Entrapment efficiencies of hirudin in coated-liposomes ranged from 5% to 55% and were dependent on several variables. Palmitoyl dextran-coated liposomes showed a burst of 30% hirudin released in 5 h with an addnl. 10% to 35% released over the next 600 h. In all samples, 30-40% of the hirudin remained associated with the lipid-systems even after 600 h. The released hirudin retained only 33% of its ability to inhibit thrombin when released from uncoated liposomes. However, hirudin retained 95% of its thrombin inhibitory activity when released from palmitoyl dextran-coated liposomes. Coated liposomes were found to stabilize hirudin and result in greater retention of hirudin's ability to inhibit thrombin's enzymic activity, although the mechanism is not yet understood.

AN 2000:464384 CAPLUS <<LOGINID::20070914>>  
DN 134:76236  
TI The stabilization and release of hirudin from liposomes or  
lipid-assemblies coated with hydrophobically modified dextran  
AU Mumper, Russell J.; Hoffman, Allan S.  
CS Center for Pharmaceutical Science & Technology, College of Pharmacy,  
University of Kentucky, Lexington, KY, 40536-0082, USA  
SO AAPS PharmSciTech (2000), 1(1), No pp. given  
CODEN: AAPHFZ; ISSN: 1522-1059  
URL: <http://www.pharmscitech.com/volumelissue1/103/manuscript.htm>  
PB American Association of Pharmaceutical Scientists  
DT Journal; (online computer file)  
LA English  
RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Gelation of Limulus lysate by synthetic dextran derivatives  
AB A simple model of endotoxin, palmitoyldextran phosphate [63026-23-3], was prepared by modification of dextran by palmitoylation and phosphorylation and was used to evaluate the bacterial endotoxin-specific Limulus test. A variety of polysaccharide derivs., such as palmitoyldextran phosphate, palmitoyldextran [63026-27-7], and dextran phosphate [9041-77-4], gave a pos. Limulus test and showed pyrogenic activity, except for low mol. dextran derivs. On the other hand, polysaccharides, such as dextran, starch [9005-25-8] (soluble), chitosan [9012-76-4], xylan [9014-63-5], and lentinan [37339-90-5], were neg. in these assays. The gelation reaction of Limulus lysate by modified dextran derivs. may depend on the mol. weight or modification of polysaccharides by palmitoylation and/or phosphorylation to a great extent.

AN 1978:70161 CAPLUS <<LOGINID::20070914>>  
DN 88:70161  
TI Gelation of Limulus lysate by synthetic dextran derivatives  
AU Suzuki, Masuko; Mikami, Takeshi; Matsumoto, Tatsuji; Suzuki, Shigeo  
CS Tohoku Coll. Pharm., Sendai, Japan  
SO Microbiology and Immunology (1977), 21(8), 419-25  
CODEN: MIIMDV; ISSN: 0385-5600  
DT Journal  
LA English

L18 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Dextran derivatives in single and combination chemotherapy against transplantable mouse ascites and solid tumors  
AB Dextran was modified by palmitoylation and/or phosphorylation to yield 3 derivs.: palmitoyldextran phosphate [63026-23-3] dextran phosphate [9041-77-4], and palmitoyldextran [63026-27-7]. Of these compds., only palmitoyldextran phosphate showed growth-inhibitory activity against Ehrlich solid tumor in mice. In combination therapy with mitomycin C [50-07-7], bleomycin [11056-06-7], cyclophosphamide [50-18-0], and 5-fluorouracil [51-21-8], palmitoyldextran phosphate manifested strong synergistic effects against both Sarcoma 180 ascites and L1210 leukemic tumors. The compound was not directly cytotoxic against Sarcoma 180 ascites tumor, but it appeared to act via activation of peritoneal macrophage. The antitumor activity of palmitoyldextran phosphate apparently is mainly due to immunol. host-mediated mechanisms.

AN 1977:593864 CAPLUS <<LOGINID::20070914>>  
DN 87:193864  
TI Dextran derivatives in single and combination chemotherapy against transplantable mouse ascites and solid tumors  
AU Suzuki, Masuko; Mikami, Takeshi; Kadowaki, Minoru; Matsumoto, Tatsuji; Suzuki, Shigeo  
CS Dep. Microbiol., Tohoku Coll. Pharm., Sendai, Japan  
SO Cancer Research (1977), 37(9), 3448-54

DT Journal  
LA English

L18 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

TI Esters of polysaccharides with phosphoric acid and palmitric acid  
AB Water-soluble polysaccharides are treated with palmitic acid halide and phosphorylation reagents in the presence of tertiary amine in formamide solvent to obtain polysaccharide phosphate palmitates. The products are effective in controlling tumor growth. Thus, 1 part dextran (mol. weight 40,000) was dissolved in 100 parts formamide and to this were added Bu<sub>3</sub>N 20 and palmitoyl chloride 5.0 parts. The mixture was heated at 70° for 2 h and to this was added 5 parts polyphosphate. The mixture was allowed to stand at room temperature for 24 h and to this was added 400 parts MeOH. The precipitate was collected, washed with MeOH, and suspended in water. The pH of the suspension was adjusted to 10 with 10% NaOH and centrifuged. The supernatant was treated with 400 parts MeOH. The precipitate was collected, washed with MeOH, and dried in vacuo to obtain a water-soluble fraction. The water-soluble fraction (1 part) was dissolved in water and worked up to yield an dextran phosphate palmitate [63026-23-3]. The compound contained sugars 46.3, P 2.3, and palmitic acid 47.8%.

AN 1977:429017 CAPLUS <<LOGINID::20070914>>

DN 87:29017

TI Esters of polysaccharides with phosphoric acid and palmitric acid

IN Suzuki, Shigeo; Suzuki, Masuko; Mikami, Takeshi

PA Kowa Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 52028583	A	19770303	JP 1975-104626	19750829
	JP 57056921	B	19821202		
PRAI	JP 1975-104626	A	19750829		

L18 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

TI Preparation and antitumor activity of O-palmitoyldextran phosphates, O-palmitoyldextrans, and dextran phosphate

AB Three O-palmitoyldextran phosphates (PalDP) were prepared by esterification of dextran with palmitoyl chloride and polyphosphoric acid. One of the H<sub>2</sub>O-insol. PalDP showed 82% growth regression against sarcoma 183 ascites-tumor in mice when administered at 1 mg/kg/day for 5 days. The H<sub>2</sub>O-soluble PalDP showed 17% growth regression at the same dosage when administered alone and 83% when combined with mitomycin C. O-palmitoyldextrans and dextran phosphates were inactive in the inhibition of this ascites tumor. Thus, the existence of both fatty acid and phosphate groups is necessary to manifest antitumor activity in polysaccharides.

AN 1977:406278 CAPLUS <<LOGINID::20070914>>

DN 87:6278

TI Preparation and antitumor activity of O-palmitoyldextran phosphates, O-palmitoyldextrans, and dextran phosphate

AU Suzuki, Masuko; Mikami, Takeshi; Matsumoto, Tatsuji; Suzuki, Shigeo

CS Dep. Microbiol., Tohoku Coll. Pharm., Sendai, Japan

SO Carbohydrate Research (1977), 53(2), 223-9

CODEN: CRBRAT; ISSN: 0008-6215

DT Journal

LA English

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	14.62	146.29
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-3.90	-21.84

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FILE CONTAINS CURRENT INFORMATION.  
 LAST RELOADED: Sep 7, 2007 (20070907/UP).

=> file hcaplus		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.12	146.41
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-21.84

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FILE COVERS 1907 - 14 Sep 2007 VOL 147 ISS 13  
 FILE LAST UPDATED: 13 Sep 2007 (20070913/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s ((phosphoryl? or phosphate) (3a)dextran)

232153 PHOSPHORYL?  
 578470 PHOSPHATE  
 37537 DEXTRAN

L19 271 ((PHOSPHORYL? OR PHOSPHATE) (3A)DEXTRAN)

=> s formaldehydr

L20 0 FORMALDEHYDR

=> s immuno?

L21 868832 IMMUNO?

=> s l19 and l20

L22 0 L19 AND L20

=> s l19 and l21

L23 25 L19 AND L21

=> s l22 and (PY<2003 or AY<2003 or PRY<2003)

22889908 PY<2003

4461769 AY<2003

3940427 PRY<2003

L24 0 L22 AND (PY<2003 OR AY<2003 OR PRY<2003)

=> s l23 and (AY<2003 or PY<2003 or PRY<2003)

4461769 AY<2003

22889908 PY<2003

3940427 PRY<2003

L25 18 L23 AND (AY<2003 OR PY<2003 OR PRY<2003)

=> file stnguide

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	2.60	149.01
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-21.84

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=> file hcaplus

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.06	149.07
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-21.84

FILE 'HCAPLUS' ENTERED AT 17:24:41 ON 14 SEP 2007  
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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s formaldehyde

L26 149140 FORMALDEHYDE

=> s l19 and l26

L27 0 L19 AND L26

=> s l27 and (AY<2003 or PY<2003 or PRY<2003)

4461769 AY<2003

22889908 PY<2003

3940427 PRY<2003

L28 0 L27 AND (AY<2003 OR PY<2003 OR PRY<2003)

=> file stnguide

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	2.60	151.67
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-21.84

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FILE CONTAINS CURRENT INFORMATION.  
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=> file hcaplus

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.06	151.73
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-21.84

FILE 'HCAPLUS' ENTERED AT 17:25:29 ON 14 SEP 2007  
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FILE LAST UPDATED: 13 Sep 2007 (20070913/ED)

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This file contains CAS Registry Numbers for easy and accurate  
substance identification.

=> s phosphoryl?

L29 232153 PHOSPHORYL?

=> s polysaccharide

L30 62385 POLYSACCHARIDE

=> s l29 and l30 and l26

L31 3 L29 AND L30 AND L26

=> s l31 and (AY<2003 or PY<2003 or PRY<2003)

4461769 AY<2003  
22889908 PY<2003  
3940427 PRY<2003

L32 3 L31 AND (AY<2003 OR PY<2003 OR PRY<2003)

=> file stnguide

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	2.60	154.33
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-21.84

FILE 'STNGUIDE' ENTERED AT 17:25:36 ON 14 SEP 2007  
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FILE CONTAINS CURRENT INFORMATION.  
LAST RELOADED: Sep 7, 2007 (20070907/UP).

=> d l32 1-3 ti abs bib

YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y

L32 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Analysis of the chromosome sequence of the legume symbiont *Sinorhizobium meliloti* strain 1021  
AB *Sinorhizobium meliloti* is an  $\alpha$ -proteobacterium that forms agronomically important N<sub>2</sub>-fixing root nodules in legumes. We report here the complete sequence of the largest constituent of its genome, a 62.7% GC-rich 3654,135-bp circular chromosome. Annotation allowed assignment of a function to 59% of the 3341 predicted protein-coding ORFs, the rest exhibiting partial, weak, or no similarity with any known sequence. Unexpectedly, the level of reiteration within this replicon is low, with only two genes duplicated with more than 90% nucleotide sequence identity, transposon elements accounting for 2.2% of the sequence, and a few hundred short repeated palindromic motifs (RIME1, RIME2, and C) widespread over the chromosome. Three regions with a significantly lower GC content are most likely of external origin. Detailed annotation revealed that this

replicon contains all housekeeping genes except two essential genes that are located on pSymB. Amino acid/peptide transport and degradation and sugar metabolism appear as two major features of the *S. meliloti* chromosome. The presence in this replicon of a large number of nucleotide cyclases with a peculiar structure, as well as of genes homologous to virulence determinants of animal and plant pathogens, opens perspectives in the study of this bacterium both as a free-living soil microorganism and as a plant symbiont.

AN 2001:634531 HCAPLUS <<LOGINID::20070914>>

DN 136:258038

TI Analysis of the chromosome sequence of the legume symbiont *Sinorhizobium meliloti* strain 1021

AU Capela, Delphine; Barloy-Hubler, Frederique; Gouzy, Jerome; Bothe, Gordana; Ampe, Frederic; Batut, Jacques; Boistard, Pierre; Becker, Anke; Boutry, Marc; Cadieu, Edouard; Dreano, Stephane; Gloux, Stephanie; Godrie, Therese; Goffeau, Andre; Kahn, Daniel; Kiss, Erno; Lelaure, Valerie; Masuy, David; Pohl, Thomas; Portetelle, Daniel; Puhler, Alfred; Purnelle, Benedicte; Ramsperger, Ulf; Renard, Clotilde; Thebault, Patricia; Vandenbol, Micheline; Weidner, Stefan; Galibert, Francis

CS Laboratoire de Biologie Moleculaire des Relations Plantes-Microorganismes, Unite Mixte de Recherche (UMR) 215 Centre National de la Recherche Scientifique (CNRS), Institut National de la Recherche Agronomique, Chemin, Tolosan, F-31326, Fr.

SO Proceedings of the National Academy of Sciences of the United States of America (2001), 98(17), 9877-9882  
CODEN: PNASA6; ISSN: 0027-8424

PB National Academy of Sciences

DT Journal

LA English

RE.CNT 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2007 ACS on STN

TI *Methylobacillus*: a new genus of obligately methylotrophic bacteria

AB A new genus and species of obligately methylotrophic bacteria are described. These bacteria are nonmotile, gram-neg. rods occurring singly and in pairs. Only methanol and methylamine can support growth. Formaldehyde fixation occurs mainly via the 3-hexulose phosphate pathway, and cell exts. contain a glutathione-independent, nicotinamide adenine dinucleotide-linked formaldehyde dehydrogenase. The DNA base composition is 54.1 mol% guanine plus cytosine. N-limited cells accumulate >5% of their dry weight as a glycogen-like reserve material. This polysaccharide is a homoglycan which is similar to glycogen in its iodine-staining properties and its degree of degradation by phosphorylase a. Some of the glucose mols. are  $\alpha$ -1,4 linked, and the presence of other types of bonds in the glucan is implied. The name of the type species is *M. glycogenes*, and the type strain is T-11(ATCC 29475).

AN 1977:514359 HCAPLUS <<LOGINID::20070914>>

DN 87:114359

TI *Methylobacillus*: a new genus of obligately methylotrophic bacteria

AU Yordy, Jerry R.; Weaver, Terry L.

CS Dep. Microbiol., Cornell Univ., Ithaca, NY, USA

SO International Journal of Systematic Bacteriology (1977), 27(3), 247-55

CODEN: IJSBA8; ISSN: 0020-7713

DT Journal

LA English

L32 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2007 ACS on STN

TI Phosphorylated glycans produced from nonreducing mono- and oligosaccharides by the action of phosphorus pentoxide in dimethyl sulfoxide, and their interactions with concanavalin A

AB The action of P<sub>2</sub>O<sub>5</sub> in Me<sub>2</sub>SO on methyl  $\alpha$ -D-glucopyranoside, sucrose,

and trehalose afforded nondialyzable, phosphorylated glycans in .apprx.6-34% yields. Polysucrose had a mol. weight of .apprx. 9,500. The synthetic glycans consisted of carbohydrate (46-59%) and P (11.4-13.1%) and showed reducing sugar values (5.0.apprx.30.8%). Alkaline hydrolysis of polysucrose was accompanied with a depolymn. and afforded sugar phosphates and oligosaccharides. The periodate oxidation gave formic acid (0.15-0.34 mole) and formaldehyde (0.07-0.17 mole/monosaccharide residue). The methylation study indicated their variously branched structures. 2,3,4,6-Tetra-O-methyl-D-glucose was found in only 0.7-3.2% yields; this is in agreement with their weak precipitation reactions with concanavalin A.

It is considered that the glycans are produced from nonreducing mono- and oligosaccharides by dehydration, transglycosidation, and esterification with phosphate.

AN 1976:1525 HCAPLUS <<LOGINID::20070914>>

DN 84:1525

TI Phosphorylated glycans produced from nonreducing mono- and oligosaccharides by the action of phosphorus pentoxide in dimethyl sulfoxide, and their interactions with concanavalin A

AU Hirano, Shigehiro; Nishio, Tomikazu; Ito, Tatsuro

CS Dep. Agric. Biochem., Tottori Univ., Tottori, Japan

SO Agricultural and Biological Chemistry (1975), 39(10), 1963-7

CODEN: ABCHA6; ISSN: 0002-1369

DT Journal

LA English

=> d 123 1-25 ti

YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y

L23 ANSWER 1 OF 25 HCAPLUS COPYRIGHT 2007 ACS on STN

TI Porous calcium phosphate bone material

L23 ANSWER 2 OF 25 HCAPLUS COPYRIGHT 2007 ACS on STN

TI Inositol phosphate derivatives and method of detecting inositol-1-phosphate

L23 ANSWER 3 OF 25 HCAPLUS COPYRIGHT 2007 ACS on STN

TI Compositions and methods for treating cancer

L23 ANSWER 4 OF 25 HCAPLUS COPYRIGHT 2007 ACS on STN

TI Powder injection of total alkaloid of Fibranea recisa

L23 ANSWER 5 OF 25 HCAPLUS COPYRIGHT 2007 ACS on STN

TI Powder injection of total glycoside of Paeonia root

L23 ANSWER 6 OF 25 HCAPLUS COPYRIGHT 2007 ACS on STN

TI Dextran from Leuconostoc mesenteroides augments immunostimulatory effects by the introduction of phosphate groups

L23 ANSWER 7 OF 25 HCAPLUS COPYRIGHT 2007 ACS on STN

TI Phosphorylated dextran as immunopotentiator

L23 ANSWER 8 OF 25 HCAPLUS COPYRIGHT 2007 ACS on STN

TI Dextran-binding human plasma antibody recognizes bacterial and yeast antigens and is inhibited by glucose concentrations reached in diabetic sera

L23 ANSWER 9 OF 25 HCAPLUS COPYRIGHT 2007 ACS on STN

TI Phosphorylated sugar alcohols from basidiomycetes and dextran as antiviral drugs and health foods

L23 ANSWER 10 OF 25 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Intestinal infection with Giardia spp. reduces epithelial barrier function in a myosin light chain kinase-dependent fashion

L23 ANSWER 11 OF 25 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Phosphorus-containing polymers for optical signal transducers

L23 ANSWER 12 OF 25 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Method for the preparation of microspheres which contain colloidal systems

L23 ANSWER 13 OF 25 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Apparatus and method to encapsulate, kill and remove malignancies, including selectively increasing absorption of x-rays and increasing free-radical damage to residual tumors targeted by ionizing and non-ionizing radiation therapy

L23 ANSWER 14 OF 25 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Deficiency of antibody responses to T-independent antigens in gerbils-Meriones unguiculatus

L23 ANSWER 15 OF 25 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Expression of antibodies in mammalian cells

L23 ANSWER 16 OF 25 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Hair growth/maintenance compositions and methods involving the same

L23 ANSWER 17 OF 25 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Dextran Sulfate Inhibits IFN- $\gamma$ -Induced Jak-Stat Pathway in Human Vascular Endothelial Cells

L23 ANSWER 18 OF 25 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Adjuvant for enhancing the yield of antibodies in immunology

L23 ANSWER 19 OF 25 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI The uptake and expression of the factor VIII and reporter genes by vascular cells

L23 ANSWER 20 OF 25 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI A microtransfection method using the luciferase-encoding reporter gene for the assay of human immunodeficiency virus LTR promoter activity

L23 ANSWER 21 OF 25 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Polysaccharide-modified immunoglobulins having reduced immunogenic potential and unaltered or improved pharmacokinetics

L23 ANSWER 22 OF 25 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Determination of antigenic determinant group-containing compounds

L23 ANSWER 23 OF 25 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Selective alteration of the humoral response to  $\alpha$ 1-3 dextran and phosphorylcholine by early administration of monoclonal antiidiotype antibody

L23 ANSWER 24 OF 25 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Dextran derivatives in single and combination chemotherapy against transplantable mouse ascites and solid tumors

L23 ANSWER 25 OF 25 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Inhibition of the immunosuppressive activity of corticosteroids by polyanions

=> d l23 6 7 9 13 24 ti abs bib

YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y

L23 ANSWER 6 OF 25 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Dextran from Leuconostoc mesenteroides augments immunostimulatory effects by the introduction of phosphate groups  
 AB The immunol. effects of phosphorylated dextran (in which phosphate groups were chemical introduced) on murine splenocytes were examined When dextran produced by Leuconostoc mesenteroides was phosphorylated by a reaction with polyphosphoric acid in formamide solution for 48 h, the degree of phosphorylation of dextran was maximal. The highest phosphorus content (1.7%, wt/wt) was observed in 40 kDa of dextran. The mitogenic response of murine splenocytes was enhanced by the phosphorylated dextran, but its activity was not related to its mol. weight A strong response was detected at a concentration of 10 to 500 µg/mL, and the highest activity was obtained 48 h after stimulation. Phosphorylated dextran was characterized as a B-cell-specific mitogen. The expressions of CD86 on CD8α-CD11c- and CD8α-CD11c+ cells were augmented by phosphorylated dextran. The levels of mRNA expression of gamma interferon and interleukin-10 on murine splenocytes were also increased by the stimulation. These results demonstrate that dextran exerts immunostimulation by the introduction of phosphate groups.  
 AN 2004:731155 HCAPLUS <<LOGINID::20070914>>  
 DN 142:5362  
 TI Dextran from Leuconostoc mesenteroides augments immunostimulatory effects by the introduction of phosphate groups  
 AU Sato, Toshihiro; Nishimura-Uemura, Junko; Shimosato, Takeshi; Kawai, Yasushi; Kitazawa, Haruki; Saito, Tadao  
 CS NOF Corporation, Shibuya-ku, Tokyo, 150-6019, Japan  
 SO Journal of Food Protection (2004), 67(8), 1719-1724  
 CODEN: JFPRDR; ISSN: 0362-028X  
 PB International Association for Food Protection  
 DT Journal  
 LA English  
 RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 7 OF 25 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Phosphorylated dextran as immunopotentiator  
 AB It is clarified that an immunopotential activity can be imparted to dextran, which shows no immunol. activity, by chemical phosphorylating it. The phosphorylated dextran is a B cell mitogen, activates dendritic cells and induces IL-10 and IFN-γ. Thus, it is expected as being effective in preventing infectious diseases and colitis and preventing allergic diseases by maintaining the Th1/2 balance. Phosphorylated dextran was prepared from dextran and polyphosphoric acid, and its blastogenic effect on mouse spleen cells was examined  
 AN 2004:80514 HCAPLUS <<LOGINID::20070914>>  
 DN 140:151931  
 TI Phosphorylated dextran as immunopotentiator  
 IN Saito, Tadao; Kitazawa, Haruki  
 PA Meiji Dairies Corporation, Japan  
 SO PCT Int. Appl., 51 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	WO 2004009099	A1	20040129	WO 2003-JP9324	20030723
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,				

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
 GM, HR, HU, ID, IL, IN, IS, KE, KG, KR, KZ, LC, LK, LR, LS, LT,  
 LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH,  
 PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT,  
 TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,  
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

JP 2004107316 A 20040408 JP 2003-50739 20030227  
 AU 2003252244 A1 20040209 AU 2003-252244 20030723  
 EP 1543833 A1 20050622 EP 2003-765361 20030723  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK  
 US 2006154896 A1 20060713 US 2005-522047 20051020  
 PRAI JP 2002-213305 A 20020723  
 JP 2003-50739 A 20030227  
 WO 2003-JP9324 W 20030723

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 9 OF 25 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Phosphorylated sugar alcohols from basidiomycetes and dextran as antiviral  
 drugs and health foods  
 AB Phosphorylated sugar alcs. (including  $\beta$ -glucan )from basidiomycetes  
 and dextran prepared by pretreatment with ZnCl<sub>2</sub> and urea melting or enzyme  
 method are claimed as antiviral drugs (e.g. against HIV1) and health  
 foods.  
 AN 2003:166958 HCAPLUS <<LOGINID::20070914>>  
 DN 138:163508  
 TI Phosphorylated sugar alcohols from basidiomycetes and dextran as antiviral  
 drugs and health foods  
 IN Akabane, Toru; Kitani, Yoshiyasu; Baba, Masanori; Tadano, Toshio  
 PA Uma K. K., Japan  
 SO Jpn. Kokai Tokkyo Koho, 4 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003063968	A	20030305	JP 2001-295057	20010823
PRAI	JP 2001-295057		20010823		

L23 ANSWER 13 OF 25 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Apparatus and method to encapsulate, kill and remove malignancies,  
 including selectively increasing absorption of x-rays and increasing  
 free-radical damage to residual tumors targeted by ionizing and  
 non-ionizing radiation therapy  
 AB Methods for conducting an operation on a living organism are provided,  
 including methods in which a channel is provided around a tissue of the  
 organism, and an encapsulating composition is infused into the channel to  
 encapsulate the tissue in a capsule. The capsule impedes materials  
 encapsulated therein from migrating to other tissues outside the capsule.  
 Also provided are apparatuses for performing methods of the invention. In  
 addition, an improved method of radiation therapy, in which a locally  
 persistent radiation enhancing agent, such as iron dextran or  
 colloidal chromic phosphate P-32, is administered in or near a  
 tissue to be treated, is provided. The methods and apparatuses are especially  
 useful in the treatment and removal of tumors.  
 AN 2002:309726 HCAPLUS <<LOGINID::20070914>>  
 DN 136:306090  
 TI Apparatus and method to encapsulate, kill and remove malignancies,  
 including selectively increasing absorption of x-rays and increasing

free-radical damage to residual tumors targeted by ionizing and  
 non-ionizing radiation therapy  
 IN Carroll, Robert G.  
 PA Oncology Innovations, Inc., USA  
 SO U.S., 20 pp., Cont.-in-part of U.S. Ser. No. 195,056.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6375634	B1	20020423	US 1999-286516	19990406
	WO 2000059422	A1	20001012	WO 2000-US1280	20000120
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	DE 10084445	T0	20020711	DE 2000-10084445	20000120
PRAI	US 1997-66195P	P	19971119		
	US 1998-195056	A2	19981118		
	US 1999-286516	A	19990406		
	WO 2000-US1280	W	20000120		

RE.CNT 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 24 OF 25 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Dextran derivatives in single and combination chemotherapy against transplantable mouse ascites and solid tumors  
 AB Dextran was modified by palmitoylation and/or phosphorylation to yield 3 derivs.: palmitoyldextran phosphate [63026-23-3] dextran phosphate [9041-77-4], and palmitoyldextran [63026-27-7]. Of these compds., only palmitoyldextran phosphate showed growth-inhibitory activity against Ehrlich solid tumor in mice. In combination therapy with mitomycin C [50-07-7], bleomycin [11056-06-7], cyclophosphamide [50-18-0], and 5-fluorouracil [51-21-8], palmitoyldextran phosphate manifested strong synergistic effects against both Sarcoma 180 ascites and L1210 leukemic tumors. The compound was not directly cytotoxic against Sarcoma 180 ascites tumor, but it appeared to act via activation of peritoneal macrophage. The antitumor activity of palmitoyldextran phosphate apparently is mainly due to immunol. host-mediated mechanisms.  
 AN 1977:593864 HCAPLUS <<LOGINID::20070914>>  
 DN 87:193864  
 TI Dextran derivatives in single and combination chemotherapy against transplantable mouse ascites and solid tumors  
 AU Suzuki, Masuko; Mikami, Takeshi; Kadowaki, Minoru; Matsumoto, Tatsuji; Suzuki, Shigeo  
 CS Dep. Microbiol., Tohoku Coll. Pharm., Sendai, Japan  
 SO Cancer Research (1977), 37(9), 3448-54  
 CODEN: CNREA8; ISSN: 0008-5472  
 DT Journal  
 LA English

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PASSWORD:



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FULL ESTIMATED COST	0.12	193.63
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-28.08

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.42	193.93
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-28.08

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FILE COVERS 1907 - 14 Sep 2007 VOL 147 ISS 13  
 FILE LAST UPDATED: 13 Sep 2007 (20070913/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s (polyphosphate or polyphosphoric or pyrophosphate or pyrophosphoric)

	15369 POLYPHOSPHATE
	19361 POLYPHOSPHORIC
	41316 PYROPHOSPHATE
	2905 PYROPHOSPHORIC
L33	70529 (POLYPHOSPHATE OR POLYPHOSPHORIC OR PYROPHOSPHATE OR PYROPHOSPHO RIC)

=> s formamide or formaldehyde

	23113 FORMAMIDE
	149140 FORMALDEHYDE
L34	171538 FORMAMIDE OR FORMALDEHYDE

=> s l19 and l33

L35 10 L19 AND L33

=> s 119 and 134

L36 4 L19 AND L34

=> s 119 and 133 and 134

L37 2 L19 AND L33 AND L34

=> s 135 and (PY<2003 or AY<2003 or PRY<2003)

22889908 PY<2003

4461769 AY<2003

3940427 PRY<2003

L38 8 L35 AND (PY<2003 OR AY<2003 OR PRY<2003)

=> s 136 and (PY<2003 or AY<2003 or PRY<2003)

22889908 PY<2003

4461769 AY<2003

3940427 PRY<2003

L39 3 L36 AND (PY<2003 OR AY<2003 OR PRY<2003)

=> s 137 and (PY<2003 or AY<2003 or PRY<2003)

22889908 PY<2003

4461769 AY<2003

3940427 PRY<2003

L40 1 L37 AND (PY<2003 OR AY<2003 OR PRY<2003)

=> file stnguide

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	2.60	196.53
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-28.08

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FILE CONTAINS CURRENT INFORMATION.  
LAST RELOADED: Sep 7, 2007 (20070907/UP).

=> d 138 1-8 ti

YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y

L38 ANSWER 1 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Phosphorylated dextran as immunopotentiator

L38 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Phosphorus-containing polymers for optical signal transducers

L38 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Phosphorylated polyhydroxy compounds for tartar control

L38 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI A reinvestigation of the phosphorylation of dextran with  
polyphosphoric acid: evidence for the formation of different

types of phosphate moieties

L38 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Interactions between dextran phosphates and human hemoglobin

L38 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Evidence for the involvement of a glucose 6-phosphate carrier in  
 microsomal glucose 6-phosphatase activity

L38 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Esters of polysaccharides with phosphoric acid and palmitric acid

L38 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Preparation and antitumor activity of O-palmitoyldextran phosphates,  
 O-palmitoyldextrans, and dextran phosphate

=> d l38 1 3 4 5 6 7 8 ti abs bib  
 YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y

L38 ANSWER 1 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Phosphorylated dextran as immunopotentiator  
 AB It is clarified that an immunopotential activity can be imparted to  
 dextran, which shows no immunol. activity, by chemical phosphorylating it.  
 The phosphorylated dextran is a B cell mitogen,  
 activates dendritic cells and induces IL-10 and IFN- $\gamma$ . Thus, it is  
 expected as being effective in preventing infectious diseases and colitis  
 and preventing allergic diseases by maintaining the Th1/2 balance.  
 Phosphorylated dextran was prepared from dextran and  
 polyphosphoric acid, and its blastogenic effect on mouse spleen  
 cells was examined

AN 2004:80514 HCAPLUS <<LOGINID::20070914>>  
 DN 140:151931  
 TI Phosphorylated dextran as immunopotentiator  
 IN Saito, Tadao; Kitazawa, Haruki  
 PA Meiji Dairies Corporation, Japan  
 SO PCT Int. Appl., 51 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004009099	A1	20040129	WO 2003-JP9324	20030723 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2004107316	A	20040408	JP 2003-50739	20030227 <--
AU 2003252244	A1	20040209	AU 2003-252244	20030723 <--
EP 1543833	A1	20050622	EP 2003-765361	20030723 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2006154896	A1	20060713	US 2005-522047	20051020 <--
PRAI JP 2002-213305	A	20020723	<--	
JP 2003-50739	A	20030227		

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Phosphorylated polyhydroxy compounds for tartar control  
AB An anticariogenic anticalculus dentifrice comprise an anticariogenic agent and an antitartar agent. The antitartar agent is formed by phosphorylation of a polyhydroxy compound with mol. weight  $\leq 5000$  kDa. The phosphorylated polyhydroxy compound has a molar substitution of  $\leq 2$  based on mol. weight of an average repeat unit in the starting polyhydroxy compound and possesses phosphate ester linkage satisfying at least 1 criteria of (a)  $\geq 1$  multi-substituted phosphate ester linked through an O to a single C of the polyhydroxy compound, and (b)  $\geq 2$  monophosphate groups separated by  $\leq 3$  C. Dextran (I) was added to a solution of polyphosphoric acid, tri-N-butylamine, and N,N-dimethylformamide and heated to  $120^\circ$  for 6h, then it was poured into EtOH. Saturated NaCl solution was added to the above mixture to aid polymer precipitation followed by purification and lyophilization of precipitate to obtain a white powder.

## Formulation

of a toothpaste containing the phosphorylated I is given.

AN 1993:197835 HCAPLUS <<LOGINID::20070914>>

DN 118:197835

TI Phosphorylated polyhydroxy compounds for tartar control

IN Spaltro, Suree Methmanus; Aronson, Michael Paul

PA Unilever N. V., Neth.; Unilever PLC

SO Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 512599	A2	19921111	EP 1992-201108	19920421 <--
	EP 512599	A3	19930512		
	EP 512599	B1	19951220		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, PT, SE				
	US 5202111	A	19930413	US 1991-697835	19910509 <--
	AT 131721	T	19960115	AT 1992-201108	19920421 <--
	ES 2082342	T3	19960316	ES 1992-201108	19920421 <--
PRAI	US 1991-697835	A	19910509	<--	

L38 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN

TI A reinvestigation of the phosphorylation of dextran with polyphosphoric acid: evidence for the formation of different types of phosphate moieties

AB The products of phosphorylation of dextran with polyphosphoric acid were re-investigated by gel filtration, potentiometric titration, and  $^{31}\text{P}$  NMR spectroscopy. Mainly (80-88%) alkyl phosphates were formed together with alkyl diphosphates and dialkyl phosphates, the percentages of which depended on the duration of phosphorylation. Mild acid treatment of the crude samples hydrolyzed the diphosphates and gave products with  $>95\%$  of monophosphate structures.

AN 1989:194996 HCAPLUS <<LOGINID::20070914>>

DN 110:194996

TI A reinvestigation of the phosphorylation of dextran with polyphosphoric acid: evidence for the formation of different types of phosphate moieties

AU Sacco, Daniel; Klett-Zygmunt, Daniele; Dellacherie, Edith

CS Lab. Chim.-Phys. Macromol., CNRS, Nancy, 54042, Fr.

SO Carbohydrate Research (1988), 184, 193-202

CODEN: CRBRAT; ISSN: 0008-6215

DT Journal

LA English

L38 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN

TI Interactions between dextran phosphates and human hemoglobin

AB Dextran phosphates were prepared by direct phosphorylation of dextran of .hivin.Mw .simeq. 36,000 by means of polyphosphoric acid. This reaction gives rise to a mixture of structures containing at least 80-85% of diprotic monoesters such as ROPO<sub>3</sub>H<sub>2</sub>, the other structures being more complex in particular with crosslinking chains such as -OP(O)(OH)OP(O)(OH)-. These chains can be hydrolyzed in acidic conditions leading to polysaccharide derivs. containing phosphates essentially under the diprotic monoester form. These various compds., in the presence of Hb, provoke a decrease of its affinity for O and this effect increases with the phosphate substitution rate and with the amount of -OP(O)(OH)OP(O)(OH)- chains. The covalent fixation of these polyanionic dextrans onto Hb should lead to the oxygen-carrier conjugates with high mol. weight and low O affinity, useful in blood transfusion.

AN 1988:443346 HCAPLUS <<LOGINID::20070914>>

DN 109:43346

TI Interactions between dextran phosphates and human hemoglobin

AU Zygmunt, D.; Labrude, P.; Vigneron, C.; Sacco, D.; Dellacherie, E.

CS Lab. Chim. Phys. Macromol., ENSIC, Nancy, 54042, Fr.

SO Journal de Chimie Physique et de Physico-Chimie Biologique (1988), 85(2), 315-18

CODEN: JCPBAN; ISSN: 0021-7689

DT Journal

LA French

L38 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN

TI Evidence for the involvement of a glucose 6-phosphate carrier in microsomal glucose 6-phosphatase activity

AB Protease and diazobenzenesulfonate were used to probe the transverse topol. of the microsomal glucose 6-phosphatase system. Treatment of intact microsomes with these reagents under the conditions used did not affect the permeability of the membrane to mannose 6-phosphate, nucleoside diphosphatase, or dextran of 70,000 mol. weight. Nor did these treatments inactivate the hydrolytic site of glucose 6-phosphatase, a finding in agreement with earlier conclusions that this site is on the inside of the membrane. On the other hand, treatment of intact microsomes with diazobenzenesulfonate or proteases inactivated (or increased the apparent Km of) some other component which was rate-limiting for glucose 6-phosphatase activity in intact but not in disrupted microsomes. The simplest explanation for this phenomenon is that there is a protein carrier in the microsomal membrane which transports glucose 6-phosphate from the medium to the lumen, where it is hydrolyzed, and that diazobenzenesulfonate and proteases attack this carrier. The lack of effect of these reagents on microsomal inorg. pyrophosphatase activity suggests that the glucose 6-phosphate carrier cannot transport pyrophosphate. Treatment of microsomes with NH<sub>3</sub> broke down their permeability barrier but also removed significant amts. of microsomal phospholipid and inactivated a number of microsomal enzymes. It is not recommended as a general approach to altering microsomal permeability.

AN 1978:184741 HCAPLUS <<LOGINID::20070914>>

DN 88:184741

TI Evidence for the involvement of a glucose 6-phosphate carrier in microsomal glucose 6-phosphatase activity

AU Nilsson, Olle S.; Arion, William J.; Depierre, Joseph W.; Dallner, Gustav; Ernster, Lars

CS Dep. Biochem., Univ. Stockholm, Stockholm, Swed.

SO European Journal of Biochemistry (1978), 82(2), 627-34

CODEN: EJBCAI; ISSN: 0014-2956

DT Journal

LA English

L38 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN

TI Esters of polysaccharides with phosphoric acid and palmitric acid

AB Water-soluble polysaccharides are treated with palmitic acid halide and phosphorylation reagents in the presence of tertiary amine in formamide solvent to obtain polysaccharide phosphate palmitates. The products are effective in controlling tumor growth. Thus, 1 part dextran (mol. weight 40,000) was dissolved in 100 parts formamide and to this were added Bu<sub>3</sub>N 20 and palmitoyl chloride 5.0 parts. The mixture was heated at 70° for 2 h and to this was added 5 parts polyphosphate. The mixture was allowed to stand at room temperature for 24 h and to this was added 400 parts MeOH. The precipitate was collected, washed with MeOH, and suspended in water. The pH of the suspension was adjusted to 10 with 10% NaOH and centrifuged. The supernatant was treated with 400 parts MeOH. The precipitate was collected, washed with MeOH, and dried in vacuo to obtain a water-soluble fraction. The water-soluble fraction (1 part) was dissolved in water and worked up to yield an dextran phosphate palmitate [63026-23-3]. The compound contained sugars 46.3, P 2.3, and palmitic acid 47.8%.

AN 1977:429017 HCAPLUS <<LOGINID::20070914>>

DN 87:29017

TI Esters of polysaccharides with phosphoric acid and palmitric acid

IN Suzuki, Shigeo; Suzuki, Masuko; Mikami, Takeshi

PA Kowa Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 52028583	A	19770303	JP 1975-104626	19750829 <--
	JP 57056921	B	19821202		
PRAI	JP 1975-104626	A	19750829	<--	

L38 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN

TI Preparation and antitumor activity of O-palmitoyldextran phosphates, O-palmitoyldextrins, and dextran phosphate

AB Three O-palmitoyldextran phosphates (PalDP) were prepared by esterification of dextran with palmitoyl chloride and polyphosphoric acid. One of the H<sub>2</sub>O-insol. PalDP showed 82% growth regression against sarcoma 183 ascites-tumor in mice when administered at 1 mg/kg/day for 5 days. The H<sub>2</sub>O-soluble PalDP showed 17% growth regression at the same dosage when administered alone and 83% when combined with mitomycin C. O-palmitoyldextrins and dextran phosphates were inactive in the inhibition of this ascites tumor. Thus, the existence of both fatty acid and phosphate groups is necessary to manifest antitumor activity in polysaccharides.

AN 1977:406278 HCAPLUS <<LOGINID::20070914>>

DN 87:6278

TI Preparation and antitumor activity of O-palmitoyldextran phosphates, O-palmitoyldextrins, and dextran phosphate

AU Suzuki, Masuko; Mikami, Takeshi; Matsumoto, Tatsuji; Suzuki, Shigeo

CS Dep. Microbiol., Tohoku Coll. Pharm., Sendai, Japan

SO Carbohydrate Research (1977), 53(2), 223-9

CODEN: CRBRAT; ISSN: 0008-6215

DT Journal

LA English